An impressionistic painting of a tree with vibrant yellow and green foliage, set against a soft, hazy background. The brushstrokes are visible and textured, giving the scene a sense of movement and light. The overall color palette is dominated by yellows, greens, and muted blues/greys.

Operations and Long-term performance task

Rossella Caruso and Ioana C. Mariş

17 May 2018

What we know and towards what we are heading

Thanks to the previous task leaders, Claudio and Fred!

A task to collect and correct problems related to the evolution of the detectors.

Questions to be answered within the task:

Hardware related:

- SD: Will the PMTs/batteries/solar panels last at least until 2025?
- FD: Will the PMTs age considerably?
- Shifts status (SD/SSD to be implemented?)

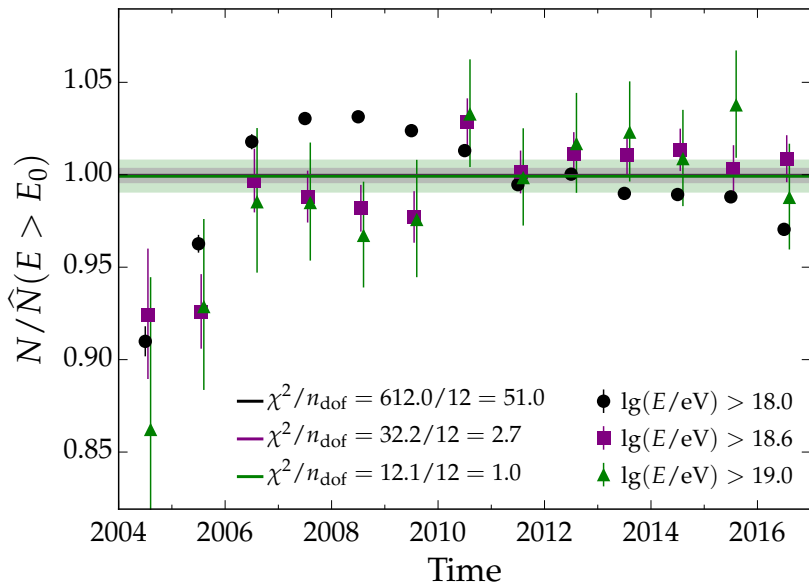
Analysis related:

- SD: time evolution and corrections for the SD variables (i.e. Area/Peak, energy, attenuation, spectrum, ...)
- FD: time evolution and corrections for the FD variables (i.e. X_{\max} , energy for different telescopes, # events after quality cuts, ...)
- take advantage of the hybrid nature of Auger
- input from the physics tasks

How? → gathering information and manpower

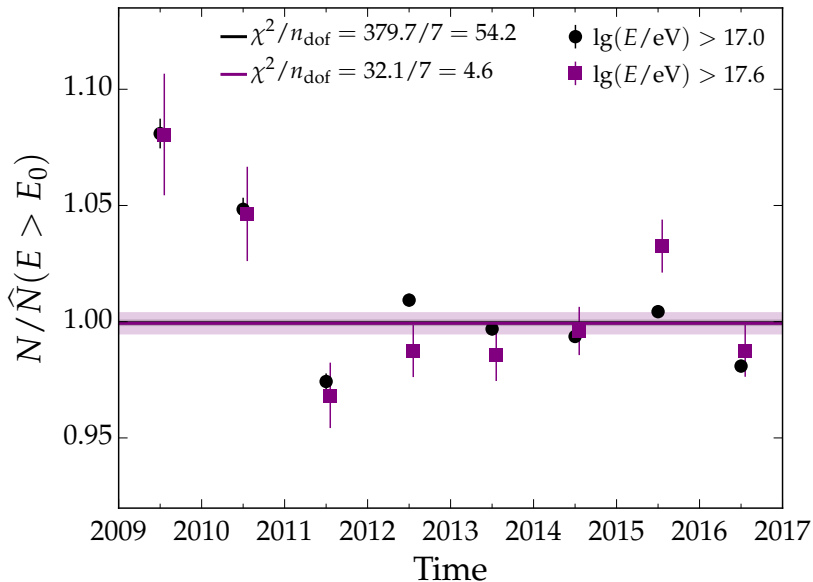
Energy spectrum and trigger rates

Ines Valino, Daniela Mockler, Francesco Fenu



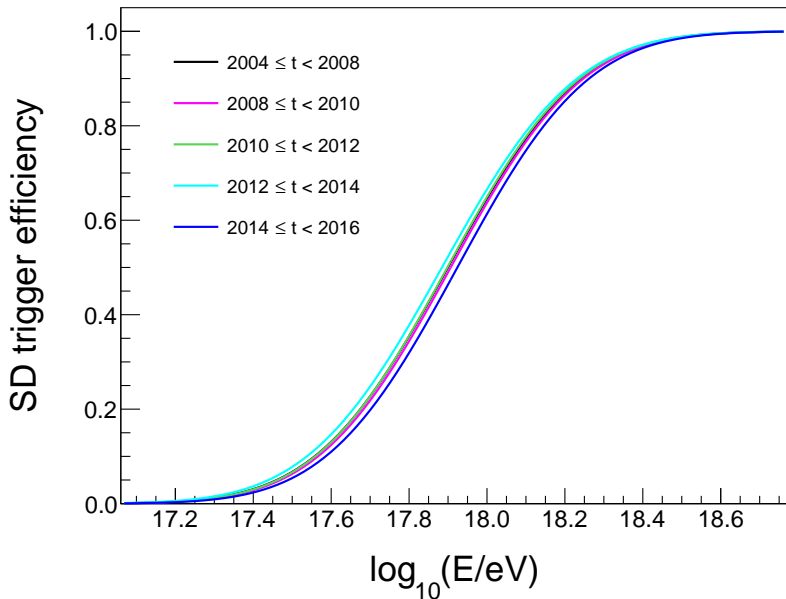
Energy spectrum and trigger rates

Ines Valino, Daniela Mockler, Francesco Fenu



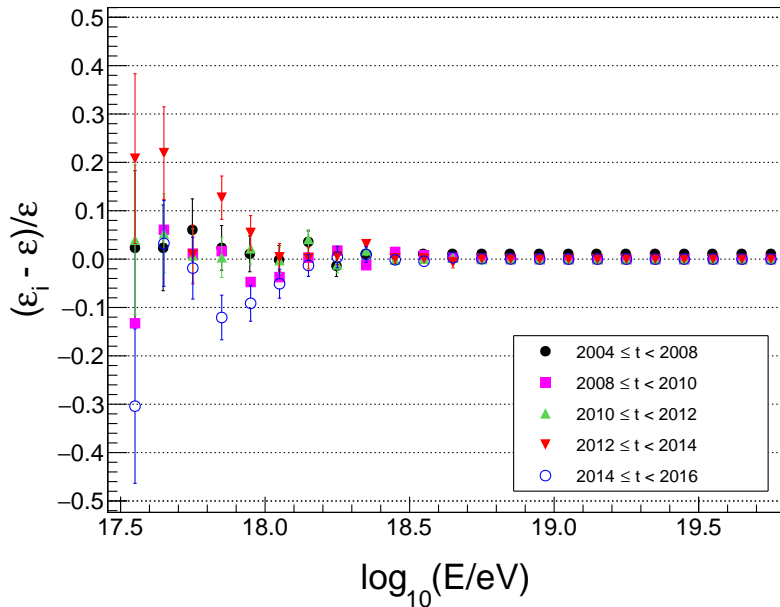
Energy spectrum and trigger rates

Ines Valino, Daniela Mockler, Francesco Fenu



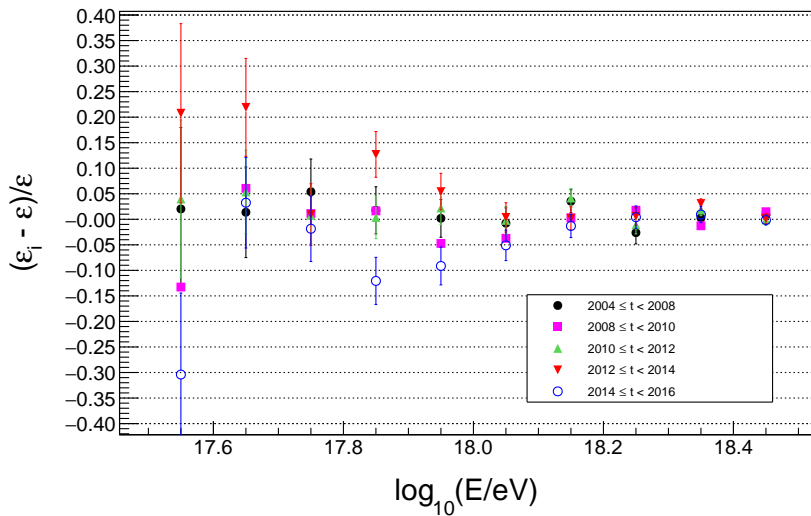
Energy spectrum and trigger rates

Ines Valino, Daniela Mockler, Francesco Fenu



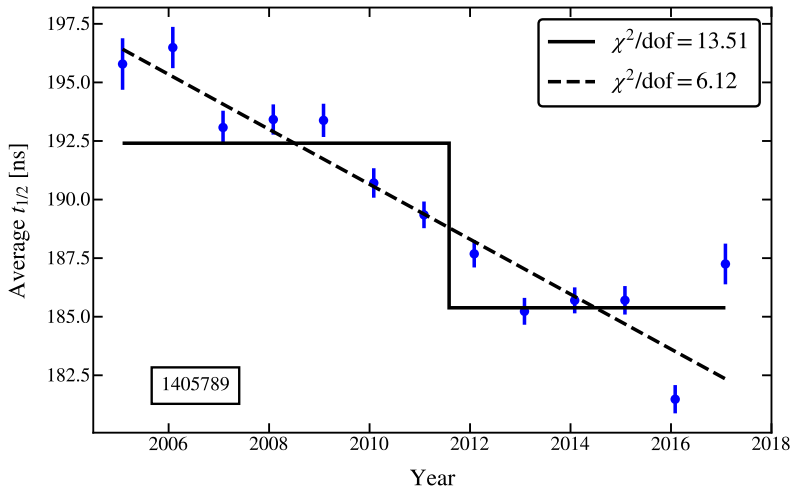
Energy spectrum and trigger rates

Ines Valino, Daniela Mockler, Francesco Fenu



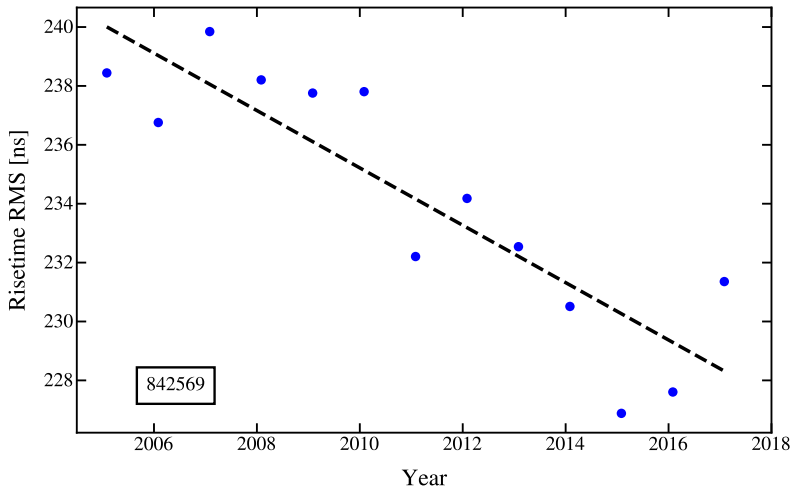
Effects on the risetime (below 60 degrees)

Juan Miguel Carceller, Antonio Bueno



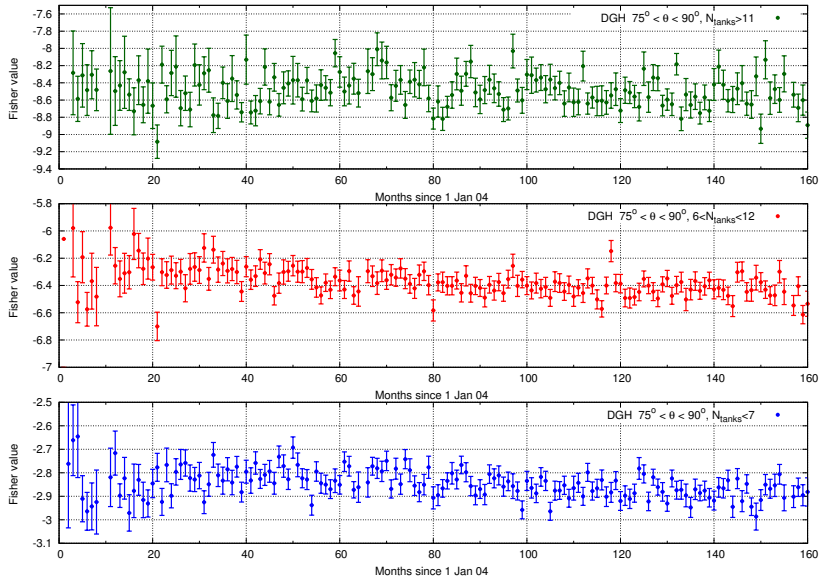
Effects on the risetime (below 60 degrees)

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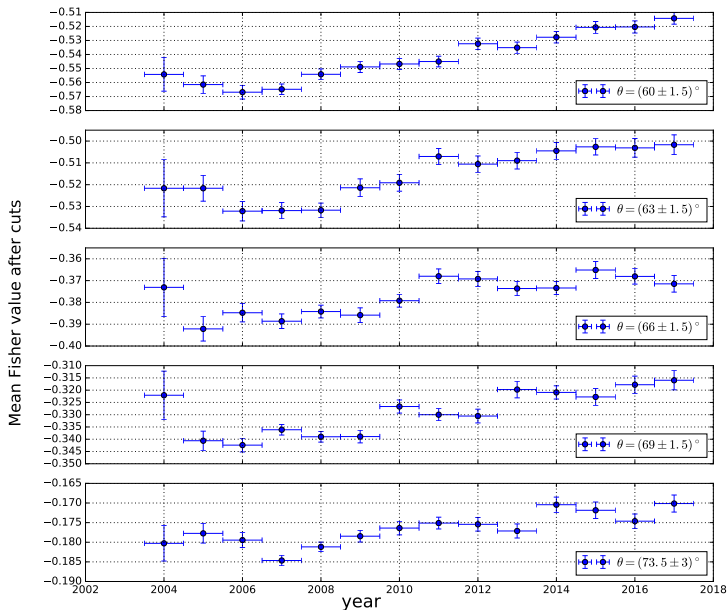
Fisher discriminator neutrinos

Jaime Alvarez-Muniz, Michael Schrimp



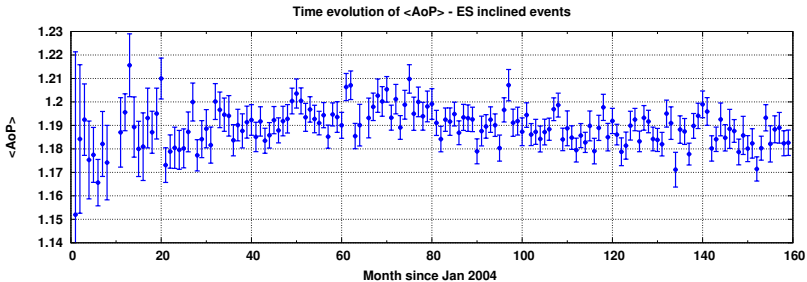
Fisher discriminator neutrinos

Jaime Alvarez-Muniz, Michael Schrimp



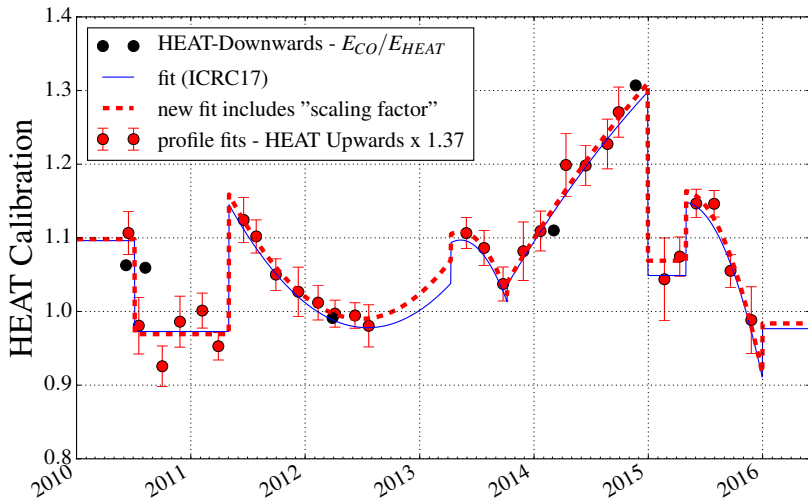
Fisher discriminator neutrinos

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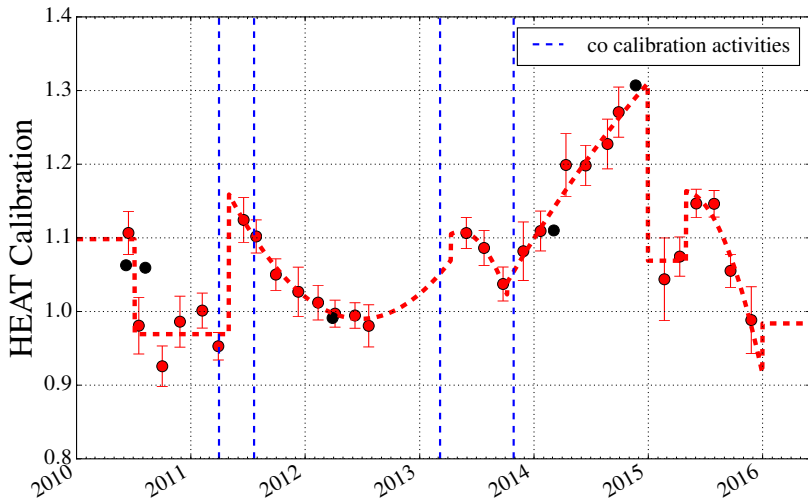
HEAT-Cohueco differences

Jose Bellido



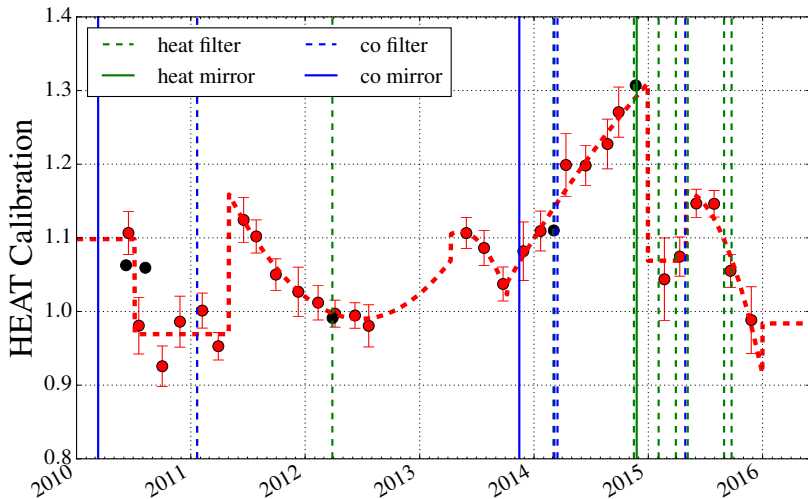
HEAT-Cohueco differences

Jose Bellido



HEAT-Cohueco differences

Jose Bellido



Outlook

Gathering information has started (thanks to all people that have responded)

More information → better solutions

Your variable shows funny features? → send the plot to the list